

The first record of *Mermessus denticulatus* (Banks, 1898) (Araneae: Linyphiidae) in Egypt

Hisham K. El-Hennawy
41 El-Manteqa El-Rabia St., Heliopolis, Cairo 11341, Egypt
E-mail address: el_hennawy@hotmail.com

Abstract

Mermessus denticulatus (Banks, 1898) and genus *Mermessus* O.P.-Cambridge, 1899 of family Linyphiidae are recorded from Egypt for the first time.

Keywords: Spiders, Linyphiidae, *Mermessus denticulatus*, Cairo, Egypt.

Introduction

Genus *Mermessus* O.P.-Cambridge, 1899 of Family Linyphiidae Blackwall, 1859 includes 80 species, mainly recorded from North and Central America [Mexico 37 (29 endemic), USA 32 (16 endemic), Canada 12 (1 endemic)], and northern South America with the exception of 6 species recorded from the Old World also [*Mermessus bryantae* (Ivie & Barrows, 1935) from Azores, *M. denticulatus* (Banks, 1898) from Europe and North Africa, *M. fradeorum* (Berland, 1932) from Azores, South Africa, and New Zealand (cosmopolitan), *M. maculatus* (Banks, 1892) from Russia, *M. naniwaensis* (Oi, 1960) from China and Japan, and *M. trilobatus* (Emerton, 1882) from Europe] (Platnick, 2012).

Banks (1898) described the female of *Tmeticus denticulatus* from Mexico. Crosby, in Chamberlin (1924) described the male and female of the same species as *Erigone eschatologica*. Crosby & Bishop (1928) described the species again and transferred it to genus *Eperigone*. Roewer (1942) transferred this species to genus *Centromerus*. Millidge (1987) redescribed *Eperigone eschatologica* in his revision of the genus. Klein *et al.* (1995) recorded *Eperigone eschatologica* from Germany and discussed its efficiency as a biological control agent of the whitefly *Trialeurodes vaporariorum* (Homoptera) in ornamental plants in glass houses. Miller (2007) transferred it from *Centromerus* to *Mermessus*. Bosmans (2007) redescribed the species from the "Maghreb", North Africa. Helsdingen & Ijland (2007) discussed the records of genus *Mermessus* from Europe (Spain, Germany, and Netherlands) and its species' modes of distribution. Helsdingen (2009) described in detail the genitalia of both male and

female of *Mermessus denticulatus* as an adventive species in the Netherlands and discussed its spreading potential.

Only one male specimen of *Mermessus denticulatus* (Banks, 1898) was found in Heliopolis, Cairo, Egypt. It is the first record of both the species and genus *Mermessus* from Egypt. This new record increases the known linyphiid Egyptian fauna (El-Hennawy, 2006) to 9 species of 9 genera.

Abbreviations used: CL = cephalothorax length; CW = cephalothorax width; L = length; TL = total length. All measurements were taken in millimetres.



Figs. 1-5: *Mermessus denticulatus* (Banks, 1898) ♂, from Cairo, Egypt.
1-2. Habitus. 1. dorsal view. 2. ventral view. 3. Eyes and chelicerae, frontal view.
4-5. Pedipalp. 4. retrolateral view. 5. mesoventral view.

***Mermessus denticulatus* (Banks, 1898)**

(Figs. 1-5)

Tmeticus denticulatus Banks, 1898: 243, pl. 14, f. 29 (♀).

Erigone eschatologica Crosby, in Chamberlin, 1924: 643, f. 85-88 (♂♀).

Eperigone eschatologica Crosby & Bishop, 1928: 51, f. 113-116 (♂♀).

Centromerus denticulatus Roewer, 1942: 532.

Eperigone eschatologica Millidge, 1987: 37, f. 132-136 (♂♀).

Eperigone eschatologica Klein, Stock & Wunderlich, 1995: 302, f. 4-7 [after Millidge, 1987] (♂♀).

Mermessus denticulatus Miller, 2007: 132, f. 92G-H (T♀ from *Centromerus*, S♂).

Eperigone eschatologica Bosmans, 2007: 124, f. 25-31 (♂♀).

Mermessus denticulatus van Helsdingen, 2009: 618, f. 1-10 (♂♀).

Material examined: 1♂, Egypt, Cairo governorate, Cairo, Heliopolis (30°05'06"N, 31°19'12"E, elevation 46m). Coll. H.K. El-Hennawy, 7 April 2012.

Description: Male (Figs. 1-2): TL 2.36, CL 1.25, CW 1.01, CL/CW 1.24.

Carapace orange-brown; sides of cephalic part darker. Ocular area, among eyes, mostly blackish. Anterior median eyes smaller than other eyes, nearer to each other than to anterior lateral eyes. Posterior eyes equidistant. Chelicerae (Fig. 3) with meso-frontal tooth and a row of antero-lateral denticles (at base) or hook-shaped teeth (towards tip). Legs slender, light yellowish brown; femur I shorter than the cephalothorax.

Pedipalp (Figs. 4-5): Patella without spines, apically with a small ventral protrusion. Tibia with long hairs; dorsally with a sharply pointed dark-brown apical apophysis; tip of tibia and base of cymbium light-brown, other parts light yellow.

Abdomen (Fig. 1): L 1.17; grey with faint paler chevrons dorsally, darker posteriorly.

Habitat. The single specimen of *Mermessus denticulatus* from Cairo fell on my hand from a tree (arboreal?).

Acknowledgment

I am indebted to Dr. Robert Bosmans (Gent, Belgium) who identified *Mermessus denticulatus* from photographs and provided me with his relevant drawings.

References

- Banks, N. 1898. Arachnida from Baja California and other parts of Mexico. *Proc. Calif. Acad. Sci.*, (3) 1: 205-308.
- Bosmans, R. 2007. Contribution to the knowledge of the Linyphiidae of the Maghreb. Part XII. Miscellaneous erigonine genera and additional records (Araneae: Linyphiidae: Erigoninae). *Bull. Annls Soc. r. belge Ent.*, 143: 117-163.
- Chamberlin, R.V. 1924. The spider fauna of the shores and islands of the Gulf of California. *Proc. Calif. Acad. Sci.*, 12: 561-694.
- Crosby, C.R. & Bishop, S.C. 1928. Revision of the spider genera *Erigone*, *Eperigone* and *Catabrithorax* (Erigoneae). *New York St. Mus. Bull.*, 278: 1-73.
- El-Hennawy, H.K. 2006. A list of Egyptian spiders (revised in 2006). *Serket*, 10(2): 65-76.
- Helsdingen, P.J. van 2009. *Mermessus denticulatus* (Banks, 1898) and *Mermessus trilobatus* (Emerton, 1882), adventive species in the Netherlands (Araneae, Linyphiidae). *Contrib. nat. Hist.*, 12: 617-626.

Helsdingen, P.J. van & IJland, S. 2007. *Mermessus* species in the Netherlands (Araneae, Linyphiidae). *Nieuwsbrief Spinnenwerkgroep Nederl.*, 23: 27-29.

Klein, W., Stock, M. & Wunderlich, J. 1995. Zwei nach Deutschland eingeschleppte Spinnenarten (Araneae) - *Uloborus plumipes* Lucas und *Eperigone eschatologica* (Bishop) - als Gegenspieler der Weissen Fliege im Geschützten Zierpflanzenbau? *Beitr. Araneol.*, 4: 301-306.

Miller, J.A. 2007. Review of erigonine spider genera in the Neotropics (Araneae: Linyphiidae, Erigoninae). *Zool. J. Linn. Soc.*, 149(Suppl. 1): 1-263.

Millidge, A.F. 1987. The erigonine spiders of North America. Part 8. The genus *Eperigone* Crosby and Bishop (Araneae, Linyphiidae). *Am. Mus. Novit.*, 2885: 1-75.

Platnick, N.I. 2012. *The world spider catalog*, version 13.0. American Museum of Natural History, online at <http://research.amnh.org/iz/spiders/catalog>. DOI: 10.5531/db.iz.0001.

Roewer, C.F. 1942. *Katalog der Araneae von 1758 bis 1940*. Bremen, 1: 1-1040.